- (d) Conductive parts of the loading equipment shall be bonded and grounded and grounds shall not be made to other potential sources of extraneous electricity; and
- (e) Plastic tubes shall not be used as hole liners if the hole contains an electric detonator.

§56.6603 Air gap.

At least a 15-foot air gap shall be provided between the blasting circuit and the electric power source.

§56.6604 Precautions during storms.

During the approach and progress of an electrical storm, blasting operations shall be suspended and persons withdrawn from the blast area or to a safe location.

§ 56.6605 Isolation of blasting circuits.

Lead wires and blasting lines shall be isolated and insulated from power conductors, pipelines, and railroad tracks, and shall be protected from sources of stray or static electricity. Blasting circuits shall be protected from any contact between firing lines and overhead powerlines which could result from the force of a blast.

EQUIPMENT/TOOLS

§56.6700 Nonsparking tools.

Only nonsparking tools shall be used to open containers of explosive material or to punch holes in explosive cartridges.

§ 56.6701 Tamping and loading pole requirements.

Tamping and loading poles shall be of wood or other nonconductive, non-sparking material. Couplings for poles shall be nonsparking.

MAINTENANCE

§56.6800 Storage facilities.

When repair work which could produce a spark or flame is to be performed on a storage facility—

- (a) The explosive material shall be moved to another facility, or moved at least 50 feet from the repair activity and monitored; and
- (b) The facility shall be cleaned to prevent accidental detonation.

§ 56.6801 Vehicle repair.

Vehicles containing explosive material and oxidizers shall not be taken into a repair garage or shop.

§ 56.6802 Bulk delivery vehicles.

No welding or cutting shall be performed on a bulk delivery vehicle until the vehicle has been washed down and all explosive material has been removed. Before welding or cutting on a hollow shaft, the shaft shall be thoroughly cleaned inside and out and vented with a minimum ½-inch diameter opening to allow for sufficient ventilation.

§ 56.6803 Blasting lines.

Permanent blasting lines shall be properly supported. All blasting lines shall be insulated and kept in good repair.

GENERAL REQUIREMENTS

§ 56.6900 Damaged or deteriorated explosive material.

Damaged or deteriorated explosive material shall be disposed of in a safe manner in accordance with the instructions of the manufacturer.

§56.6901 Black powder.

- (a) Black powder shall be used for blasting only when a desired result cannot be obtained with another type of explosive, such as in quarrying certain types of dimension stone.
- (b) Containers of black powder shall be—
 - (1) Nonsparking;
- (2) Kept in a totally enclosed cargo space while being transported by a vehicle;
- (3) Securely closed at all times when— $\,$
- (i) Within 50 feet of any magazine or open flame;
- (ii) Within any building in which a fuel-fired or exposed-element electric heater is operating; or
- (iii) In an area where electrical or incandescent-particle sparks could result in powder ignition; and
- (4) Opened only when the powder is being transferred to a blasthole or another container and only in locations not listed in paragraph (b)(3) of this section.